

REMARKS

Claims 1-9, 11-13, and 15-39 are pending in the application. No claims have been added or cancelled. Claims 1, 12, and 23 are amended. Written description support for these amendments are found throughout the original specification; for example; at Figs. 3-4; at page 2, lines 3-9; at page 10, line 19 through page 11, line 21; at page 13, line 5 through page 14, line 7; at page 18, line 19 through page 19, line 23; and at other portions. No new matter has been added. The applicant respectfully submits that all pending claims are in condition for allowance, as more fully explained below.

Claim Rejections - 35 U.S.C. § 103

Independent claims 1, 12, and 23 and particular dependent claims stand rejected under 35 U.S.C. § 103 as being allegedly unpatentable over a 2001 archival copy of a page in the official website of D-Cubed, Lt. (the "D-Cubed reference"), in view of a January 2002 manual for the 2D Dimensional Constraint Manager by D-Cubed, Ltd. (the "2D DCM Manual"), and further in view of a 1994 manual for KeyCad ("KeyCAD"). The applicant respectfully submits that the independent claims are patentable over this proposed combination of references. Even if there was reason that would have prompted a skilled artisan to combine the D-Cubed reference with the 2D DCM Manual and KeyCad (an issue that is not conceded herein), the proposed combination would nevertheless fail to provide the subject matter described in independent claims 1, 12, and 23.

Claim 1 recites in part:

receiving a user-specified input defining a feature for a pattern and at least one inter-feature distance, the pattern defined from the feature and comprising a plurality of the feature, the inter-feature distance specifying a minimum or a maximum distance between the features of the pattern, the features of the plurality being evenly spaced relative to each other, the features of the plurality included within a boundary of a CAD geometry piece, and where a feature corresponds to a feature of the CAD geometry piece;

In the Office Action (at page 5), the Office conceded that the D-Cubed reference and the 2D DCM Manual fail to disclose the corresponding claim 1 language prior to the Applicants' current amendments. The Applicants respectfully submit that the amendments simply present additional features and that the Office's concession still holds.

The KeyCad reference does not remedy the deficiencies of the D-Cubed reference and the 2D DCM Manual. KeyCad describes a CAD program that teaches the use of a "group" function or button for manipulating objects in the CAD program. The button "is used to consolidate a set of selected objects as one grouped object. A grouped set of objects is treated as a single object, rather than several individual objects." (KeyCad, page 1-14.) One purpose of this grouping is "to make working with a design easier." (KeyCad, page 9-6.) But KeyCad does not disclose "receiving a user-specified input defining a feature for a pattern and at least one inter-feature distance," as required by claim 1. In contrast, the objects of KeyCad are pre-existing and thus are "selected" and merged into a larger "consolidated" object. (KeyCad, page 1-14).

KeyCad also fails to disclose a pattern that is defined from received user-specified input. Specifically, KeyCad does not disclose a "pattern defined from the feature and comprising a plurality of the feature, the inter-feature distance specifying a minimum or a maximum distance between the features of the pattern, the features of the plurality being evenly spaced relative to each other." In contrast, the grouping of objects of KeyCad discloses an amalgamation of random objects selected by a user of the KeyCad program. The reference does not describe receiving user-specified input from which a pattern of an evenly-space feature is defined, and where the distance between the evenly-spaced features is defined by the input.

Further unlike claim 1, the D-Cubed reference, the 2D DCM Manual, and KeyCad all fail to disclose "automatically maintaining continuous enclosure of the pattern within the modified boundary of the modified CAD geometry piece." Indeed, the Office Action (at page 5) concedes that the D-Cubed reference and the 2D DCM Manual fail to disclose this feature.

The KeyCad reference does not solve the deficiencies of the D-Cubed reference and the 2D DCM Manual in meeting Applicants' claim 1. The Office action cites passages of the KeyCAD manual that describe the use of the "Group" button that consolidates a set of selected objects with individual boundary points into a single grouped object with the same boundary

points. (Office Action at page 6.) This “grouping” does not describe a system where after a CAD geometry piece is modified, enclosure of the pattern of the features within the modified boundary of the modified CAD geometry piece is automatically maintained. Thus, for example, if the CAD geometry piece is modified such that a portion of the pattern is outside of the boundary of the modified CAD geometry piece, the pattern can be modified to maintain enclosure of the pattern within the boundary. The modifications to the pattern can include removing features from the pattern and changing dimensions of the features, for example. See, e.g., specification, p. 15 line 14 – p. 18 line 2, p. 20 lines 6-13. If a feature overlaps or interferes with the boundary, for instance, it can be removed from the pattern or resized (e.g., made smaller). The “grouping” of KeyCad clearly fails to teach automatically maintaining enclosure of the pattern within the modified boundary.

Accordingly, claim 1 and its dependent claims are in condition for allowance. Claim 12, 23, and their dependent claims are in condition for allowance for the same reasons.

Conclusion

By responding in the foregoing remarks only to particular positions taken by the examiner, the Applicant does not acquiesce with other positions that have not been explicitly addressed. In addition, the Applicant's arguments for the patentability of a claim should not be understood as implying that no other reasons for the patentability of that claim exist.

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Please apply the required \$810 for the Request for Continued Examination and any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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